

**THAT WHICH IS CLAIMED IS:**

1. A method for dicing a substrate using a programmable dicing saw having a processor operable for movement of at least one of a spindle and a work surface, wherein movement of a dicing blade toward and away from the work surface is controlled by movements within an orthogonal coordinate system having its reference center at a center location of the work surface, the method comprising the steps of:

removably securing a substrate onto the work surface;

aligning the dicing blade with a first edge of the substrate for determining a substrate first edge location datum;

rotating the dicing blade relative to the substrate about an axis perpendicular thereto;

aligning the dicing blade with at least a second edge of the substrate for determining a substrate second edge location datum;

entering the edge location data representative of the substrate into the processor for determining a center location of the substrate;

determining a distance between the center of the substrate and the center of the work surface for providing a compensating command to the programmable dicing saw;

automatically positioning the dicing blade over the center of the substrate;

and

automatically moving the spindle relative to the center of the substrate for positioning the dicing blade based on the compensating command.